

**Maloney's Fruit Trees and Ornamentals**  
Maloney's Fruit Trees and Ornamentals for Garden, Lawn and Orchard, grown in the largest nurseries in New York—guaranteed to grow true to name and description. Will increase the value and beauty of your place in color, form, taste and fragrance. Stock for much less than from agents.  
**MALONEY BROS. & WELLS CO.**, 145 West Broadway, New York, N. Y.

## Do you plant anything?

**DON'T DO IT without Bowker's Fertilizer.** Ask us for prices. If you mention The Sun we will also send Dr. Clark's "Farming as a Moral Equivalent for War" Free.

**BOWKER FERTILIZER CO.**, 60 Trinity Pl., N. Y.

Subsidiary of the American Agricultural Chemical Co.

## Burpee's Sweet Peas

**Six Superb Spencers**  
For 25¢ we will mail one regular 10-cent packet (40 to 50 seeds) each of **ELFRIDA PEARSON**, a lovely pink, of gigantic size; **KING WHITE**, the best of all White Spencers; **MRS. ROUTZAHN**, rich buff, suffused delicate pink; **VERMILION BRILLIANT**, the most brilliant scarlet Spender; **WEDGEWOOD**, a beautiful light-blue shade. Also one large packet (90 to 100 seeds) of the **BURPEE BLEND OF SUPERB SPECIES FOR 1916**. All selected varieties of sweet peas ever offered. The Burpee leaflet on Sweet Pea culture is enclosed with each collection.

**Burpee's Annual for 1916**

The Fiftieth Anniversary Edition of the Leading Seed Catalogue in the World. It contains over 1,000 new varieties, many of them new to America. It is mailed free. Write for it today and please mention this publication.

**W. A. LEE BURPEE & CO.**, Philadelphia, Pa.

Burpee Buildings

## DINGEE ROSES

**Sturdy as Oaks**

### 10 Best Varieties, \$1

**Postpaid. Sale Arrival Guaranteed.**

The following collection of our own rose bushes is guaranteed to be the best.

**Ellenberry (pink)** Lady Astor (pink)  
Doris (pink) Mrs. C. H. Nichols (pink)  
Yellow Mammoth (yellow) J. L. Mack (pink)  
Cass (pink) Mad. Chastey (pink)

**Thousand Bees (yellow),** plain, white, yellow, red, pink, blue, and thousand bees, ever-blooming. Order as the best collection. Price \$1.00. Postage 25¢. Copy of "Our New Guide to Rose Culture," Free.

**THE DINGEE & CONARD COMPANY**

Large Selections of Garden Plants

Established 41 years  
Box 261 WEST GROVE, PA.

## VICK'S GARDEN GUIDE FOR 1916

ITS FREE

Several new features on our 1916 edition of the oldest mail-order concern, and largest growers of Asters and many other flowers in America. The new edition contains all the latest planting, etc.—just what is needed as aid to a successful gardener.

The general method of using chemical fertilizers is to broadcast. This takes heavy applications, applying two-thirds broadcast and one-third in the row for cultivated crops. For wheat, oats, barley, etc., it should be drilled at the time of sowing. Corn fertilizer when not broadcasted is best applied in a continued stream from hill to hill along the row. For garden crops, including potatoes, the fertilizer is broadcast before planting and the balance worked in along the row. For beets the fertilizer should be drilled along the row when planting. Work the fertilizer in at about the base of the plants of such small fruits as raspberries, blackberries, currants, gooseberries, etc.

In backward seasons an application of nitrate of soda alongside of the rows of hills of cultivated crops helps to overcome the handicap of abnormal weather and hastens maturity.

Basic slag, sometimes called Thomas' phosphate powder, is a byproduct from the manufacture of steel. This product not only carries a high percentage of phosphoric acid, of which about 15 per cent, is available, but also contains 30 to 50 per cent. of lime. Basic slag thus serves the double purpose of supplying phosphoric acid and also a soil sweetener or acid corrector.

Basic slag can be mixed with nitrate of soda, bone meal or potash salts, but

the first agricultural paper was established in England in 1881. The title was "Collection of Letters for the Improvement of Husbandry and Trade." It was in this publication that we have the first record of turning being sown, to be turned under, for the improvement of the soil.

The composition of chemical fertilizers is usually indicated by combinations of figures such as 1-8-5 or 2-8-10. In these combinations, the first figure indicates the percentage of nitrogen, the second figure the percentage of available phosphoric acid, and the third figure the percentage of water soluble potash. For example,

the composition of the fertilizer

is 1 part nitrogen, 8 parts phosphoric acid, and 5 parts water soluble potash.

It must not be mixed with sulphate of ammonia, tankage, blood or fish scrap.

Dried ground blood is an animal product of abattoirs and packing houses.

It is an organic ammonium and comes next in degree of availability to nitrate of soda and is the most available of the organic ammoniums.

Dry fish is a good carrier of ammonia and the Atlantic Ocean is fished for a species of fish for the purpose of fertilizer only.

Ground tankage is a product of slaughter houses and a good source of organic ammonia. It also contains phosphoric acid.

Cottonseed meal is a good carrier of nitrogen and largely used in the Southern States. It costs too much for use in the north.

Ground bone carries a small percentage of ammonia and is high in phosphoric acid.

Muriate of potash is a manufactured salt from products of the Staatsburg mines, in Germany, and contains 45 to 50 per cent. actual potash.

Sulphate of potash is also a manufactured salt from the same source as muriate. It contains from 47 to 48 per cent. of actual potash, but being free from chlorine is preferred on tobacco crops as well as for certain vegetables.

Kainite is mined in Germany and is a raw product, containing only one-fourth as much potash as muriate of potash.

Nitrate of soda resembles coarse salt and is a product of the arid region of western South America. The "caliche," as it is called before it is refined, contains about 50 per cent. nitrate. This is boiled in water to dissolve the nitrate and the hot water is run off into tanks to cool, where the nitrate forms in crystals like salt. It is used as a fertilizer, for making gunpowder, refining glass, &c.

In its commercial form nitrate of soda is about 95 per cent. pure, containing about 15 per cent. nitrogen, equal to about 19 per cent. ammonia.

Two million tons are exported from China every year.

Crops that are thoroughly and constantly cultivated will do far better than crops that have been heavily fertilized and sparingly cultivated.

**GOOD FERTILIZER FORMULAS.**

For cauliflower, celery, rhubarb, cabbage and other garden crops:

300 lbs. nitrate of soda.

300 lbs. Peruvian guano.

150 lbs. 16 per cent. acid phosphate.

Mix thoroughly and apply 1,000 lbs. to the acre.

For potatoes and other garden crops:

200 lbs. of nitrate of soda can be used in the above formula.

For fruit and shade trees, shrubs, vines, &c.:

100 lbs. nitrate of soda.

100 lbs. Peruvian guano.

700 lbs. 16 per cent. acid phosphate.

Apply 500 lbs. per acre.

For strawberries and small fruits:

200 lbs. nitrate of soda.

100 lbs. Peruvian guano.

900 lbs. 16 per cent. acid phosphate.

Apply 400 lbs. per acre.

Mix these materials thoroughly on a level floor, using a spade or shovel. Spread the materials out in layers and turn over several times with the shovel. Pass through an ash sieve of a quarter inch mesh all lumps will be pulverized and a thorough mixture secured.

These formulas are for the North. On the South slightly different formulas will be required.

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